WO 2005/080680 PCT/NL2005/000120

9

Claims

- 1. Use of a protein hydrolysate derived from keratin-containing material as an additive in the wet-end of a papermaking process.
- Use according to claim 1, wherein the protein hydrolysate is derived
 from mammalian hair and/or feathers.
 - 3. Use according to claim 2, wherein the protein hydrolysate is derived from mammalian hair.
- 10 4. Use according to claim 2, wherein the protein hydrolysate is derived from feathers.
 - 5. Use according to claim 3, wherein the mammalian hair is derived from livestock.
 - 6. Use according to claim 4, wherein the feathers are derived from chickens.

15

25

- 7. Use according to claim 5, wherein the mammalian hair is derived from20 pigs.
 - 8. Process for preparing a paper pulp comprising mixing in the wet-end of a papermaking process a protein hydrolysate derived from keratin-containing material with virgin and/or recycled cellusos fibres, and recovering the paper pulp so obtained.

WO 2005/080680 PCT/NL2005/000120

10

- 9. Process for preparing a paper product comprising mixing the wet-end of a papermaking process a protein hydrolysate derived from keratin-containing material with virgin and/or recycled cellulose fibres, dewatering the mixture so obtained, pressing the dewatered material, drying the pressed material, and recovering the paper product so obtained.
- 10. Paper pulp obtainable by the process according to claim 8 comprising protein hydrolysate derived from keratin-containing material.
- 10 11. Paper pulp according to claim 10, comprising protein hydrolysate derived from keratin-containing material in an amount of from 0.1 to 50 wt.%, based on total paper product.
- 12. Paper pulp according to claim 11, comprising protein hydrolysate
 15 derived from keratin-containing material in an amount of from 0.3 to 40 wt.%,
 based on total paper product.
- 13. Paper product obtainable by a process according to claim 9 comprising protein hydrolysate derived from keratin-containing material in an amount of
 20 from 0.1 to 50 wt.%, based on total paper product.
 - 14. Paper product according to claim 13, wherein protein hydrolysate derived from keratin-containing material is present in an amount of from 0.3 to 40 wt.%, based on total paper product.

5